

## ABSTRACT OF THE DISCLOSURE

5        Methods and apparatus for efficient management of memory and force output in a force feedback system including a host computer and a force feedback device. A representation of device memory is maintained on the host computer to allow the host computer knowledge and control over storage and force effects in the device memory. A host cache for force effects is provided to allow almost unlimited numbers of force effects to be created for the device, where  
10      any force effects not able to fit in device memory are stored in the host cache. Other aspects of the invention include a playlist stored on the device of force effects being played by the device, and management of force output using relatively small, discrete time intervals.